

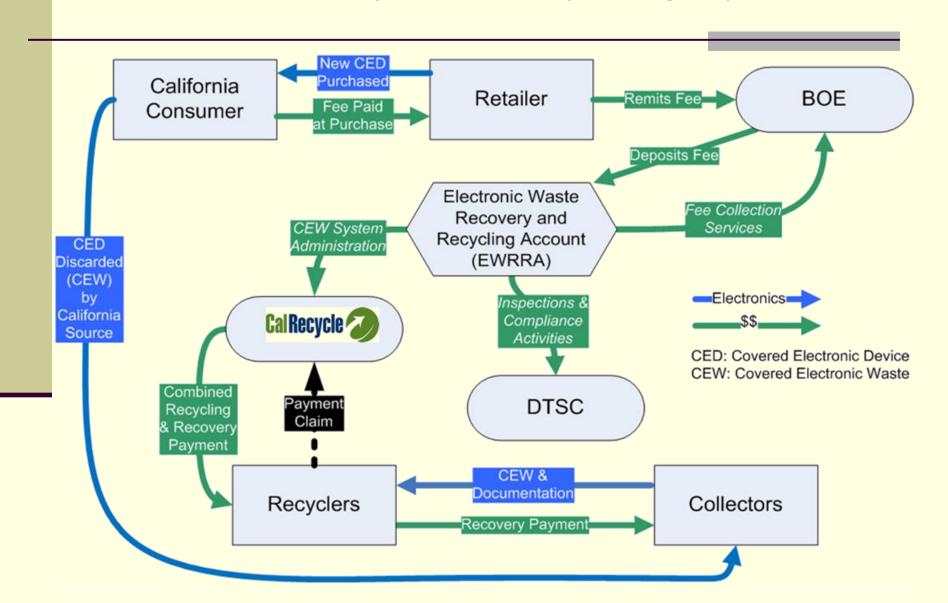
Electronic Waste Recycling Act

- PRC 42461. The Legislature finds and declares all of the following:
 - (a) The purpose of this chapter is to enact a comprehensive and innovative system for the reuse, recycling, and proper and legal disposal of covered electronic devices...

. . .

(h)...provide sufficient funding for the safe, cost-free, and convenient collection and recycling of 100 percent of the covered electronic waste initially discarded in the state, to eliminate electronic waste stockpiles and legacy devices by December 31, 2007...

CEW Recovery and Recycling System



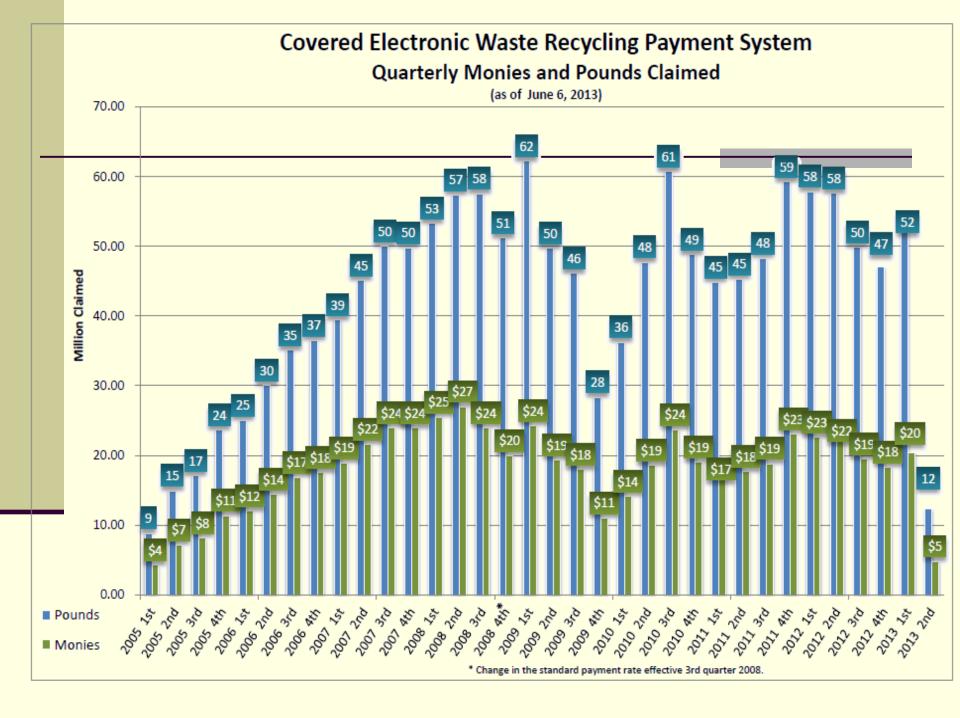
CEW Recycling Program Stats

Over 1.4 Billion Pounds of CEW Recycled

Associated infrastructure has recovered similar amounts of miscellaneous discarded electronic devices.

~ 99% (by weight) has been CRT Devices

- Volume of CRT recovered is slowing.
- Still an unknown amount of CRT yet to be discarded, but amount is finite.



Topics for Today's Workshop

Documenting Collection of CEW

- Most CEW recovery is source-identified
- Special allowances for certain collectors
- Improving "designate approved collectors"

Disposition of <u>Residual</u> CRT Glass

- Current residual CRT limitation: "disposition is not disposal to land, water or air..."
- New DTSC regulations and evolving markets prompt revisit of options

Topic #1: Managing Residual CRT Glass

Currently, before filing a payment claim:

Recycler must ship CRT glass to a destination authorized to receive and further treat that material

As part of claim:

Recycler must provide "...a discussion of the ultimate disposition of the (CRT glass) shipped demonstrating that the disposition is not disposal to land, water or air..."

Where Has the Glass Gone?

- In mid-2009, nearly 75% of CA CRT glass was directly shipped to processors in Mexico.
- Since January 2010, as much as 75% of CA CRT glass was <u>initially</u> shipped to an domestic (U.S.) destination.
- Since January 2012, as much as 35% of CA CRT glass was <u>initially</u> shipped to a foreign destination.

Where Has the Glass Gone?

- At least five CA recyclers have authorization to "treat" glass; can serve as an intermediate destination.
 - Majority of glass subsequently moved on toward CRT manufacturing (India)
- Minimal amounts of CRT glass shipped directly to traditional smelters.

Initial CRT Shipments (in millions of pounds)

_ Initial Destination	Since January 2010		Since January 2012	
<u>In-State</u>				
Top 3 Processors	127	36.4%	50	34.8%
Other 2 Processors	5	1.4%	2	1.4%
Out-of-State				
Closed Loop Refining and Recovery (Arizona)	82	23.5%	33	23%
Dlubak Glass (Arizona, Ohio)	34	9.7%		
Dow Management (Arizona)	9	2.6%	8	5.6%
Universal Recycling Technologies (Oregon)	4	1.1%		
<u>Foreign</u>				
Samtel Glass / Videocon Industries (India)	10	2.9%	6.5	4.5%
Technologies Displays Mexicana (Mexico)	78	22.3%	44	30.7%

DTSC Changes CRT Rules

DTSC recognized changing market conditions and loopholes in regulation.

- Participated in several CalRecycle workshops to outline possible changes.
- Enacted emergency rules Oct 15, 2012.
- Rules strengthened oversight; established pathways to alternative management.

Time to Reconsider Options?

Recovery and recycling of resources should be maximized, if possible and reasonable.

- Not all CRT glass is the same, presenting both opportunities and limitations.
- Do viable (environmentally sound / economically feasible) recycling markets exist? Today? Tomorrow?

Time to Reconsider Options?

- Realistic and reliable downstream(s) for CRT glass is imperative.
 - System stops working if there is no acceptable outlet for residual glass
- Stockpiling -- in-state or in other states -- in hopes of eventual new "markets" is untenable.

Time to Reconsider Options?

- Should limitations be removed on ultimate disposition of residual CRT glass beyond compliance with applicable UW / HW rules?
 - Allow for continued use of UW options so long as they exist
 - Allow for pursuit of alternative recycling if it can be demonstrated
 - Allow for regulated disposal if recycling is not economically or environmentally feasible

Proposal

■ Eliminate fundamental limitation on "...disposal to land, water or air..." for residual CRT glass.

Clarify disposal allowance when residuals are "...not economically feasible to recycle and/or cannot be recycled because it would pose a hazard to public health, safety or the environment..."

Proposal

- Maintain residual CRT (glass) shipping requirement
 - Destination authorized to receive, further treat, and/or dispose
 - Allow for alternative demonstration of onsite glass consumption (beyond simple processing)
- Impose requirement to demonstrate compliance with DTSC rules

Topic #1 Discussion



Topic #2: Designated Approved Collectors

- Currently, default CEW collection is source-identified
 - Collectors must determine eligibility and record name and address of CA source

- Collectors that are CA local gov't or designated approved collectors may cumulatively log collection
 - Date, location, circumstance, amount
 - Relieved of names and addresses

Local Gov't Participation in CEW Recycling Program_____

Local Gov'ts vs. Other Collectors...

Historically:

- > 1,400 total entities have participated
- < 90 local gov't have participated <u>directly</u>

Presently:

- ~ 550 approved collectors active
- ~ 45 of which are local gov't
- Over 360 jurisdictions have issued one or more designations

History of Designated Approved Collectors (DAC)

- Provision secured during initial rulemaking
 - League of Cities argued that it would speed collection events
 - Seen as useful for franchise haulers, HHW contractors, etc
 - Limited to residential and small quantity
- Status may be used to handle certain circumstances of illegal dumping (source anonymous CEW)

History of Designated Approved Collectors (DAC)

- Little guidance or restriction in regulation on who can issue or receive designations
- Few, if any, limits on scope, length, context

- Has resulted in unwanted solicitations and confusion at local level
 - Lack of criteria
 - Potential liability exposure

History of Designated Approved Collectors (DACs)

- Creates vulnerabilities in CEW system
 - Often little local oversight
 - No State foreknowledge of issuance or use
 - No auditable trail back to alleged sources
- Despite risks, DACs can be a useful tool in CEW collection.
 - But designations are not needed to be successful!

How to improve and ensure integrity?

Proposal

- Clarify who can issue a designation
 - Define local government (or "district")
 - Identify internal authority
- Establish criteria for issuance and oversight
 - Context of a contractual arrangement
 - Mechanism for local monitoring
- Require advance notification of issuance
 - Akin to 30-day handler notification

Proposal

- Clarify limits on receipt of CEW
 - From sources, handlers, other collectors, etc.
 - When source-identified logs are required
 - When to use SA CEW logging
- Limitations on time and destination of subsequent transfers
 - Expedite and control transfers
 - Possibly impose interim accounting / reporting

Topic #2 Discussion



Next Steps

- Program will draft proposed language
 - Identify areas in regulations requiring amendments, edits, or deletions
- Publicize proposal(s) and hold workshop(s)
 - Respond to comments, questions, concerns
- Pursue changes under emergency authority